

Amendment to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. Canceled claims have been canceled without prejudice.

Listing of Claims:

1. (Currently amended) An expression vector to express human follicle stimulating hormone (FSH) comprising

a gene encoding human FSH ~~consisting of~~ wherein the gene consists of human FSH beta subunit gene having the sequence of ~~SEQ. ID. No. 2~~ SEQ ID NO:2,

internal ribosomal entry site (IRES) sequence having the sequence of ~~SEQ. ID. No. 7~~ SEQ ID NO:7, and

~~alpha~~ human FSH alpha subunit gene having the sequence of ~~SEQ. ID. No. 4~~ SEQ ID NO:1;

a promoter sequence of early gene of cytomegalovirus (CMV) having the sequence of ~~SEQ. ID. No. 8~~ SEQ ID NO:8;

a tripartite leader sequence of adenovirus having the sequence of ~~SEQ. ID. No. 9~~ SEQ ID NO:9;

a polyadenylation motif sequence of early gene of SV40 virus having the sequence of ~~SEQ. ID. No. 13~~ SEQ ID NO:13, and/or a polyadenylation motif sequence of bovine growth hormone (BGH) gene having the sequence of ~~SEQ. ID. No. 14~~ SEQ ID NO:14; and

a dihydrofolate reductase (DHFR) gene having the sequence of ~~SEQ. ID. No. 12~~ SEQ ID NO:12,

wherein the vector expresses FSH beta and alpha subunits that form a glycosylated FSH heterodimer.

2-7. (Canceled)

8. (Original) A recombinant transformant mass-producing human FSH prepared by introducing the expression vector of claim 1 into host cells.

9. (Canceled)

10. (Previously presented) A recombinant transformant DPFC325 (Accession No: KCLRF-BP-00082) mass-producing human FSH prepared by introducing the expression vector of claim 1 into a Chinese hamster ovary (CHO) originated cell line (CHO/dhfr⁻) harboring a damaged dihydrofolate reductase (DHFR) gene.

11. (Previously presented) A method for mass-production of human follicle stimulating hormone comprising the following steps of:

- 1) transfecting host cells with the expression vector of claim 1;
- 2) selecting recombinant transformants transfected in step 1);
- 3) selecting a recombinant transformant stably producing human FSH from the recombinant transformants selected in the step 2); and
- 4) obtaining human FSH from the culture of the recombinant transformant selected in step 3).

12. (Canceled)

13. (Previously presented) The method for mass-production of human follicle stimulating hormone as set forth in claim 11, wherein the host cell of step 1) is a CHO originated cell line (CHO/dhfr⁻) harboring damaged dihydrofolate reductase (DHFR) gene.

14-17. (Canceled)

18. (New) An expression vector to express human follicle stimulating hormone (FSH) comprising

a gene encoding human FSH wherein the gene consists of

human FSH beta subunit gene having the sequence of SEQ ID NO:2,
internal ribosomal entry site (IRES) sequence having the sequence of SEQ ID NO:7, and

human FSH alpha subunit gene having the sequence of SEQ ID NO:1, sequentially in 5' to 3' direction;

a promoter sequence of early gene of cytomegalovirus (CMV) having the sequence of SEQ ID NO:8;

a tripartite leader sequence of adenovirus having the sequence of SEQ ID NO:9;

a polyadenylation motif sequence of early gene of SV40 virus having the sequence of SEQ ID NO:13, and/or a polyadenylation motif sequence of bovine growth hormone (BGH) gene having the sequence of SEQ ID NO:14; and

a dihydrofolate reductase (DHFR) gene having the sequence of SEQ ID NO:12,

wherein the vector expresses FSH beta and alpha subunits that form a glycosylated FSH heterodimer.